

FORM PCT-1300  
(REV 5-93)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER  
951/49129

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A  
FILING UNDER 35 U.S.C. 371**

U.S. APPLICATION NO. (if known, see 37 CFR 1.5)

**09/700172**INTERNATIONAL APPLICATION NO.  
PCT/EP00/01599INTERNATIONAL FILING DATE  
25 February, 2000 (25.02.00)PRIORITY DATE CLAIMED  
12 March 1999 (12.03.99)TITLE OF INVENTION  
FUEL SYSTEM FOR A MOTOR VEHICLES

APPLICANT(S) FOR DO/EO/US

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371
3. ☐ This express request to begin national examination procedures (35 U.S.C. 371(f) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ☐ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☒ is transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☐ has been transmitted by the International Bureau
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US)
6. ☒ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau)
  - b. ☐ have been transmitted by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). (unexecuted)
10. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

**Item 11. to 16. below concern other document(s) or information included:**

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A **FIRST** preliminary amendment.  
☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
14. ☐ A substitute specification.
15. ☐ A change of power of attorney and/or address letter.
16. ☒ Other items or information:
  - a. 2 sheets of drawings showing Figs. 1-2

U.S. APPLICATION NO (if known, see 37 CFR 1.5)		INTERNATIONAL APPLICATION NO		ATTORNEY'S DOCKET NUMBER	
09/700172		EP/EP00/01599		951/49129	
17. <input checked="" type="checkbox"/> The following fees are submitted:				CALCULATIONS	PTO USE ONLY
Basic National Fee (37 CFR 1.492(a)(1)-(5)):					
Search Report has been prepared by the EPO or JPO . . . . . \$860.00				860.00	
International preliminary examination fee paid to USPTO (37 CFR 1.482) . . . . . \$690.00					
No international preliminary examination fee paid to USPTO (37 CFR 1.482)					
but international search fee paid to USPTO (37 CFR 1.445(a)(2)) . . . . . \$710.00					
Neither international preliminary examination fee (37 CFR 1.482) nor					
international search fee (37 CFR 1.445(a)(2)) paid to USPTO . . . . . \$1000.00					
International preliminary examination fee paid to USPTO (37 CFR 1.482)					
and all claims satisfied provisions of PCT Article 33(2)-(4) . . . . . \$100.00					
<b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b>				\$860.00	
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input checked="" type="checkbox"/> 30				\$130.00	
months from the earliest claimed priority date (37 CFR 1.492(e)).					
Claims	Number Filed	Number Extra	Rate		
Total Claims	21-20 =	1	X \$18.00	\$18.00	
Independent Claims	3-3 =	0	X \$80.00	\$	
Multiple dependent claims(s) (if applicable)			+ \$270.00	\$	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$	
Reduction by 1/2 for filing by small entity, if applicable. Verified Small Entity statement must				\$	
also be filed. (Note 37 CFR 1.9, 1.27, 1.28).					
<b>SUBTOTAL =</b>				\$1008.00	
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30				\$--	
months from the earliest claimed priority date (37 CFR 1.492(f)).					
<b>TOTAL NATIONAL FEE =</b>				\$1008.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be				\$	
accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +					
<b>TOTAL FEE ENCLOSED =</b>				\$1008.00	
				Amount to be: refunded	\$
				charged	\$
a. <input checked="" type="checkbox"/> One check in the amount of \$ <u>1008.00</u> for the filing fee is enclosed					
b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.					
c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees, which may be required, or credit any overpayment to Deposit Account No. <u>05-1323</u> . A duplicate copy of this sheet is enclosed.					
NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.					
SEND ALL CORRESPONDENCE TO:				SIGNATURE	
Evenson, McKeown, Edwards & Lenahan, P.L.L.C.				Donald D. Evenson	
1200 G Street, N.W., Suite 700				NAME	
Washington, D.C. 20005				REGISTRATION NUMBER	
Tel. No. (202) 628-8800				26,160	
Fax No. (202) 628-8844				DATE	

Attorney Docket: 951/49129  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: HUGO KROISS ET AL.  
Serial No.: NOT YET ASSIGNED PCT No.: PCT/EP00/01599  
Filed: NOVEMBER 13, 2000  
Title: FUEL SYSTEM FOR A MOTOR VEHICLE

REQUEST FOR APPROVAL OF DRAWING CORRECTIONS

Commissioner for Patents  
Washington, D.C. 20231

October 20, 2000

Sir:

Applicant hereby respectfully requests permission to change the drawing figure as indicated in red shown on the attached sheet. These drawing changes do not add new matter to the application.

Respectfully submitted,



Donald D. Evenson  
Registration No. 26,160

EVENSON, McKEOWN, EDWARDS  
& LENAHA, P.L.L.C.  
1200 G Street, N.W., Suite 700  
Washington, DC 20005  
Telephone No.: (202) 628-8800  
Facsimile No.: (202) 628-8844  
WGA:DDE:kms

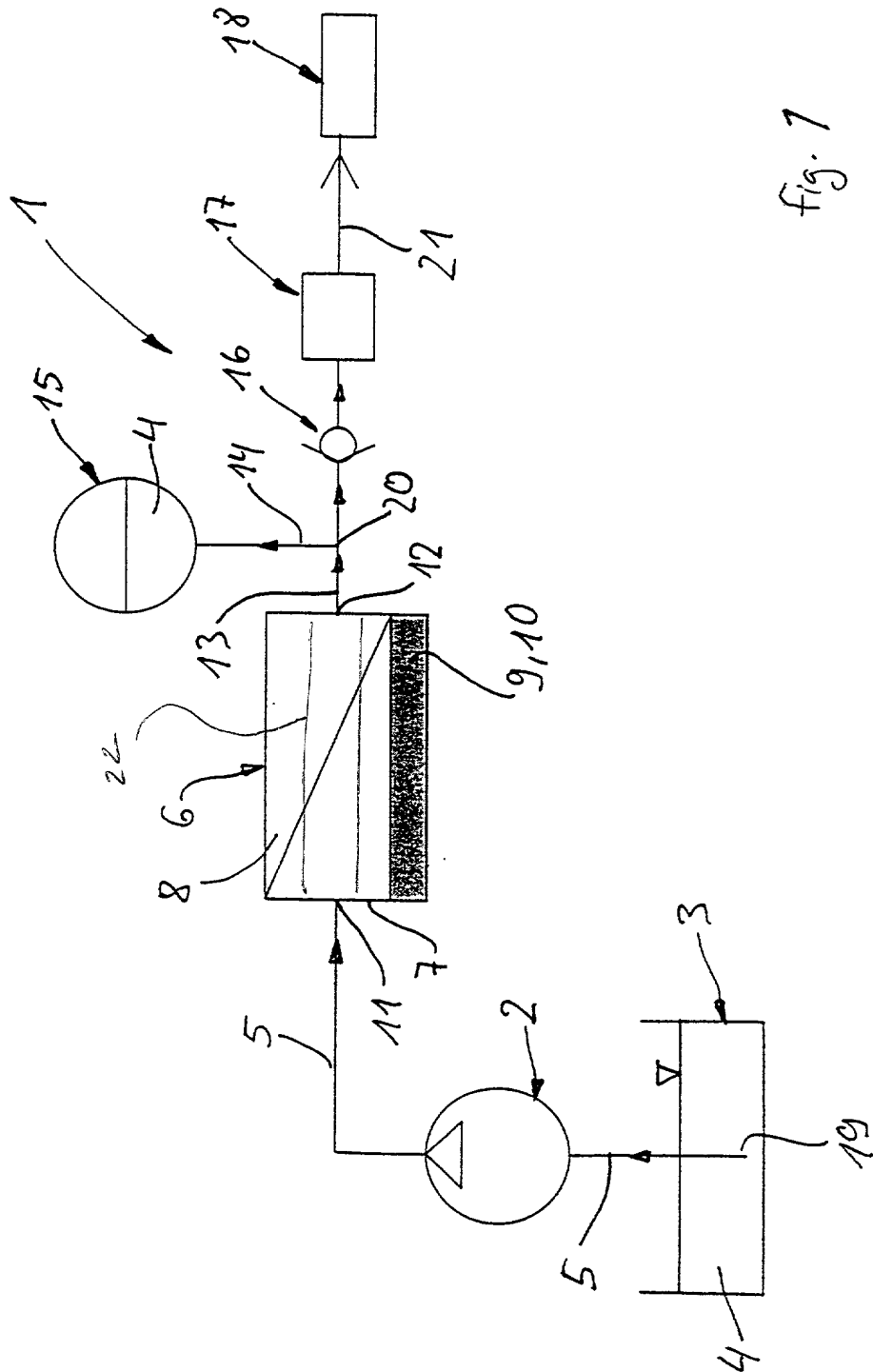


fig. 7

Attorney Docket: 951/49129  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: HUGO KROISS ET AL.  
Serial No.: NOT YET ASSIGNED PCT No.: PCT/EP00/01599  
Filed: NOVEMBER 13, 2000  
Title: FUEL SYSTEM FOR A MOTOR VEHICLE

PRELIMINARY AMENDMENT

**Box PCT**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Prior to examination of the accompanying PCT National Stage application, kindly amend the English translation of the application as follows:

IN THE SPECIFICATION:

Please amend the specification as follows:

Page 1, after the title, insert --BACKGROUND AND SUMMARY OF THE INVENTION--;

line 1, change "according to the introductory clause of Claim 1" to --with a fuel container from which a fuel pump transports fuel via fuel pipelines from a system input location in the fuel container via a fuel filter towards a motor.--

lines 19 and 20, delete in its entirety and insert the following paragraph: --This aim is fulfilled by a deposition

tank formed into a housing of the fuel filter under a filter material provided in the housing into which dirt filtered out of the fuel is deposited and a pressure accumulator is installed in the fuel system which after the motor is switched off, the fuel stored in the pressure accumulator rinses the fuel filter.--

Page 3, line 5, after "Therefore" insert a comma;

line 13, after "unit" insert a comma.

lines 16 and 17, delete ", whereby" and insert a period after "drawing".

before line 22, insert --DETAILED DESCRIPTION OF DRAWINGS--;

Page 4, line 6, after "walls" insert --22--;

line 8, after "shown" insert --in Fig. 1,--;

line 13, after "to" insert --as--; after "side" delete "in the following text";

line 20, after "example" insert a comma.

Page 5, lines 7-8, after "side" delete --of the fuel pump 2--;

IN THE DRAWINGS:

A Request for Approval of Drawing Corrections is submitted herewith.

IN THE ABSTRACT:

Please substitute the new Abstract of the Disclosure submitted herewith on a separate page for the original Abstract presently in the application.

IN THE CLAIMS:

Please cancel all of the claims presently in the application and substitute therefor the following new claims 8-22 as follows:

--8. Fuel system for a motor vehicle with a fuel container from which a fuel pump transports fuel via fuel pipelines from a system input location in the fuel container via a fuel filter towards an engine,

wherein a deposition tank is formed into a housing of the fuel filter under a filter material provided in the housing into which dirt filtered out of the fuel is deposited and

wherein a pressure accumulator is installed in the fuel system which accumulates and stores fuel when the engine is running and after the engine is switched off, the fuel stored in the pressure accumulator rinses the fuel filter.

9. Fuel system according to claim 8, wherein a portion of the fuel can be transported via the fuel pump into the pressure accumulator when the engine is running and after the engine has been switched off the fuel stored in the pressure accumulator can flow through the fuel filter removing the dirt deposited in the filter material.

10. Fuel system according to claim 8, wherein a non-return valve is provided in the fuel pipeline leading to the engine after a branch point at which the fuel pipeline leading to the pressure accumulator is located.

11. Fuel system according to claim 8, wherein a pressure regulator is provided at a non-return valve towards the direction of engine.

12. Fuel system according to claim 10, wherein a pressure regulator is provided at the non-return valve towards the engine.

13. Fuel system according to claim 11, wherein the fuel filter is connected to the fuel pump on a pressure side.

14. Fuel system according to claim 11, wherein the fuel filter is connected to the fuel pump on a suction side.

15. Fuel system according to claim 8, wherein the fuel filter is connected to the fuel pump on a pressure side.

16. Fuel system according to claim 8, wherein the fuel filter is connected to the fuel pump on a suction side.

17. Fuel system according to claim 13, wherein a delay valve is installed upstream of the pressure accumulator, so that after starting of the engine the pressure accumulator is filled with the fuel subject to a time delay.

18. Fuel system according to claim 8, wherein a delay valve is installed upstream of the pressure accumulator, so that after starting of the motor the pressure accumulator is filled with the fuel subject to a time delay.



19. Fuel system according to claim 17, wherein in the housing guide vanes are provided which prevent the fuel flowing through the filter material from touching or disturbing the dirt collected in the deposition tank.

20. Fuel system according to claim 10, wherein in the housing guide vanes are provided which prevent the fuel flowing through the filter material from touching or disturbing the dirt collected in the deposition tank.

21. Fuel system according to claim 8, wherein in the housing guide vanes are provided which prevent the fuel flowing through the filter material from touching or disturbing the dirt collected in the deposition tank.

22. Method of rinsing a fuel filter providing, a fuel system with a fuel pump, a fuel filter with filter material and a deposition tank, a pressure accumulator, a non-return valve and connecting fuel lines wherein the pressure accumulator is toward the engine from the fuel filter and the non-return valve is toward the engine from the pressure accumulator,

accumulating fuel in the pressure accumulator during engine running,

rinsing dirt from the filter material by sending the fuel accumulated in the pressure accumulator through the fuel lines via the fuel filter when the engine is turned off thereby the fuel washes the dirt on the filter material in the deposition tank.

23. Method according to claim 22, wherein the fuel pump is toward the pressure accumulator from the fuel filter.

24. Method according to claim 22, wherein the fuel filter is toward the pressure accumulator from the fuel pump.

25. Method according to claim 22, wherein the fuel after rinsing the filter material is collected in a fuel container.

26. Method according to claim 22, wherein the fuel filter, the pressure accumulator, the fuel pump and the non-return valve are a preassembled unit.

27. Method according to claim 22, wherein a pressure regulator is toward the engine from the non-return valve.

28. Fuel system for a motor vehicle wherein a pump transports fuel via fuel pipelines via a fuel filter towards a motor, wherein a deposition tank is formed into the fuel filter into which dirt filtered out of the fuel is deposited and a pressure accumulator is installed in the fuel system which after the engine is switched off, the fuel stored in the pressure accumulator rinses the fuel filter.--

REMARKS

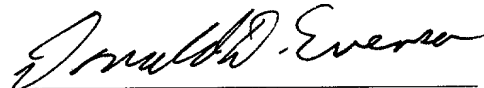
The foregoing amendments are respectfully submitted to insert recommended section headings, to present claims in better form for examination by the U.S. Patent and Trademark Office, and to add the required Abstract of the Disclosure.

Favorable action on the application is earnestly solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #951/49129).

Respectfully submitted,



Donald D. Evenson  
Registration No. 26,160

EVENSON, McKEOWN, EDWARDS  
& LENAHA, P.L.L.C.  
1200 G Street, N.W., Suite 700  
Washington, DC 20005  
Telephone No.: (202) 628-8800  
Facsimile No.: (202) 628-8844  
WGA:DDE:kms

ABSTRACT OF THE DISCLOSURE

To prevent the dirt present in the fuel from depositing on the filter material so that the resistance to the flow through the filter material rises continuously overtime, a fuel system for a vehicle is provided in such a way that the throughflow resistance of the fuel filter remain almost constant. This is achieved as a result of the formation of a deposition tank in a housing of the fuel filter under the filter material located in a housing, in which the dirt from the fuel is deposited and as a result of a pressure accumulator in the fuel system causes the fuel stored in pressure accumulator to rinse the fuel filter after the engine has been switched off.

2/PR<sup>th</sup>

09/700172  
526 Rec'd PCT/PTO 13 NOV 2000

Translation of PCT International  
Application No. PCT/EP00/01599  
Attorney Docket No. 951/49129

# FUEL SYSTEM FOR A MOTOR VEHICLE

The present invention relates to a fuel system for a motor vehicle according to the introductory clause of Claim 1.

Fuel systems for motor vehicles are already known in which  
5 a fuel filter is provided, where the fuel filter can be installed  
inside and/or outside a fuel container. The fuel flow through  
these filters is only ever in one direction. Because of this, the  
dirt contained in the fuel is increasingly deposited over time on  
the inflow side of the filter. If there is a large amount of dirt  
10 in the fuel, a filter cake can form which leads to an increase in  
throughflow resistance. This means that the demands on the  
performance of the fuel pump within the fuel system also  
increase.

This aim of the present invention is to create a fuel system  
15 for a motor vehicle in which the throughflow resistance does not  
increase over the lifetime of the vehicle or increases only  
relatively slightly.

This aim is fulfilled by the features described in the  
characterizing section of claim 1.

20 The fuel system according to the invention exhibits a fuel  
filter in which a deposition tank is provided. In addition a  
pressure accumulator is built into the system in such a way that  
the fuel which is in the pressure accumulator is depressurized  
after the engine has been switched off and rinses the filter from  
25 the fuel outlet side or clean side toward the fuel inlet side or  
dirt side. By these means the advantage is created that dirt  
which has collected on the fuel inlet side is released from the

filter and collects in the deposition tank.

5 The deposition tank of the present invention is advantageously formed by means of the structure of the housing, for example by the provision of guide vanes, in such a way that fuel does not flow through the deposition tank and therefore the deposited dirt is not disturbed.

10 The fuel filter according to the invention can advantageously be located on either the pressure side or the suction side within the fuel system, in other words, behind or in front of the fuel pump.

15 In an advantageous embodiment, with the fuel filter located on the pressure side a pressure accumulator is installed in the direction of the engine after an outlet opening of the filter housing, and with the fuel filter located on the suction side after an outlet opening of the fuel pump, and in both cases is installed in front of a pressure regulator with an upstream non-return valve. The positioning of a non-return valve between a branch point leading to the pressure accumulator and the pressure regulator prevents the fuel pipeline to the motor from emptying.

20 In an advantageous embodiment a delay valve is provided in the fuel system in order that filling of the pressure accumulator does not influence the buildup of pressure in the fuel system after the engine has been started.

25 The fuel system which is the subject of the present invention is particularly advantageous in that the fuel filter achieves a longer lifetime. A further advantage is that by means of the structure of the fuel filter as embodied in the invention,

the filter volume can be decreased in comparison with a known fuel filter while maintaining the same lifetime.

Because the fuel filter is cleaned each time the engine is switched off, the volume throughflow resistance of the fuel filter remains approximately constant. Therefore the fuel pump of the fuel system only needs to exert normal pressure and not increased pressure as is the case with a blocked fuel filter, so that the lifetime of the fuel pump is higher in comparison with fuel systems with traditional fuel filters.

A further advantage is that the fuel filter, the pressure regulator, the fuel pump, the non-return valve, the pressure accumulator and possibly the surge chamber can be implemented in the form of a preassembled unit and therefore the emissions are also less.

Several embodiments of the invention are described as examples in the following text with reference to the drawing, whereby

Figure 1 shows a basic diagram of a fuel system, where the fuel filter is located on the pressure side; and

Figure 2 shows a basic diagram of a fuel system, where the fuel filter is provided on the suction side.

Figure 1 shows a first embodiment of a fuel system 1 where a fuel pump 2 transports fuel 4 from a fuel container 3 for example via a surge chamber which is not shown by means of fuel pipelines 5 to a fuel filter 6. The fuel filter 6 exhibits a housing 7 in which a filter material 8, for example woven filter

material or filter paper, is located.

5 Beneath the filter material 8 a deposition tank 9 is formed into housing 7 which is arranged or protected so that fuel 4 flowing through filter material 8 does not influence dirt 10 collecting in deposition tank 9. For example, guide vanes or walls can be provided in housing 7 which prevent swirling up of the dirt 10 in deposition tank 9 due to the fuel flow.

10 In the embodiment shown, fuel filter 6 exhibits at least one inlet opening 11 on housing 7 for the fuel 4 to be cleaned and at least one outlet opening 12 from which the cleaned fuel 4 flows into pipeline 13. The filter material 8 next to the inlet opening 11 becomes dirty most quickly and for this reason this side of filter material 8 is referred to the dirt side in the following text. A pipeline 14 leading to a pressure accumulator 15 is connected to pipeline 13 at a branch point 20. The cleaned fuel 4 flows via a non-return valve 16 and a pressure regulator 17 connected to it through pipeline 21 to engine 18.

20 When the engine 18 is running, the fuel pump 2 transports a predetermined volume of fuel 4 into pressure accumulator 15, which can, for example be in the form of a membrane pressure accumulator. After the engine 18 is switched off, the pressure accumulator 15 is depressurized so that the fuel 4 which is located in pressure accumulator 15 flows back via pipeline 13 and through outlet opening 12 into fuel filter 6 and there rinses the filter material 8 so that the dirt 10 which has particularly collected on the dirt side of filter material 8 is released and arrives in deposition tank 9 via appropriate means. The fuel 4 which rinses the filter material then flows back through inlet opening 11, pipelines 5, through fuel pump 2 to the inlet point



19 in fuel container 3. Because of the location of non-return valve 16 between branch point 20 to pressure accumulator 15 and pressure regulator 17, pipeline 21 to engine 18 is not emptied during rinsing of fuel filter 6.

5           The second embodiment of fuel system 2 shown in Figure 2 differs from the first embodiment of the fuel system 1 shown in Figure 1 in that fuel filter 6 is positioned on the suction side of the fuel pump 2. A further difference between the two figures is in the flow direction of fuel 4 which is shown. While in  
10       Figure 1 fuel system 1 is shown with engine 18 running, as indicated by the flow direction of fuel 4 shown by arrows, Figure 2 shows fuel system 1 after engine 18 has been switched off, where the fuel 4 located in pressure accumulator 15 flows back through fuel pump 2 and fuel filter 6 into fuel container 3, as  
15       is also indicated by arrows.

          Fuel pump 2 accordingly pumps fuel 4 out of fuel container 3 through fuel filter 6 and transports this fuel 4 via a non-return valve 16 and a pressure regulator 17 to engine 18. In addition, when engine 18 and fuel pump 2 are in operation, a  
20       predetermined volume of fuel 4 is transported to pressure accumulator 15.

          In both embodiments a delay valve can be provided in branch pipeline 14, so that pressure accumulator 15 is filled with fuel 4 with a time delay after starting of engine 18.

**Patent Claims**

1. Fuel system for a motor vehicle with a fuel container from which a fuel pump transports fuel via fuel pipelines from a system input location in the fuel container via a fuel filter towards a motor, wherein a deposition tank (9) is formed into a housing (7) of the fuel filter (6) under a filter material (8) provided in the housing (7) into which dirt (10) filtered out of the fuel (4) is deposited and a pressure accumulator (15) is installed in the fuel system (1) which after the engine (18) is switched off, the fuel (4) stored in the pressure accumulator (15) rinses the fuel filter (6).

2. Fuel system according to Claim 1 wherein a portion of the fuel (4) can be transported via the fuel pump (2) into pressure accumulator (15) when motor (18) is running and after motor engine (18) has been switched off the fuel (4) stored in the pressure accumulator (15) can flow through the fuel filter (6) in such a way that dirt (8) deposited in the filter material (10) is removed.

3. Fuel system according to claim 1 or 2, wherein a non-return valve (16) is provided in a fuel pipeline (13) leading to engine (18) after a branch point (20) at which a fuel pipeline (14) leading to pressure accumulator (15) is located.

4. Fuel system according to one of the aforementioned claims wherein a pressure regulator (17) is provided at a non-return valve (16) in the direction of engine (18).

5. Fuel system according to one of the aforementioned claims, wherein the fuel filter (6) is connected to the fuel pump

(2) on the pressure or the suction side.

6. Fuel system according to one of the aforementioned claims, wherein a delay valve is installed upstream of pressure accumulator (15), so that after starting of engine (18) the pressure accumulator (15) is filled with fuel (4) subject to a time delay.

7. Fuel system according to one of the aforementioned claims, wherein in housing (7) guide vanes or similar structures are provided which prevent fuel (4) flowing through filter material (8) from touching or disturbing the dirt (10) collected in deposition tank (9).

**ABSTRACT**

To prevent the dirt present in the fuel from depositing on the filter material so that the resistance to the flow through the filter material rises continuously over time, a fuel system for a vehicle is provided in such a way that the throughflow resistance of the fuel filter remain almost constant. This is achieved as a result of the formation of a deposition tank (9) in a housing (7) of the fuel filter (6) under the filter material (8) located in housing (7), in which the dirt (10) from the fuel (4) is deposited and as a result of a pressure accumulator (15) in the fuel system (1) causes the fuel (4) stored in pressure accumulator (15) to rinse the fuel filter (6) after the engine (18) has been switched off.

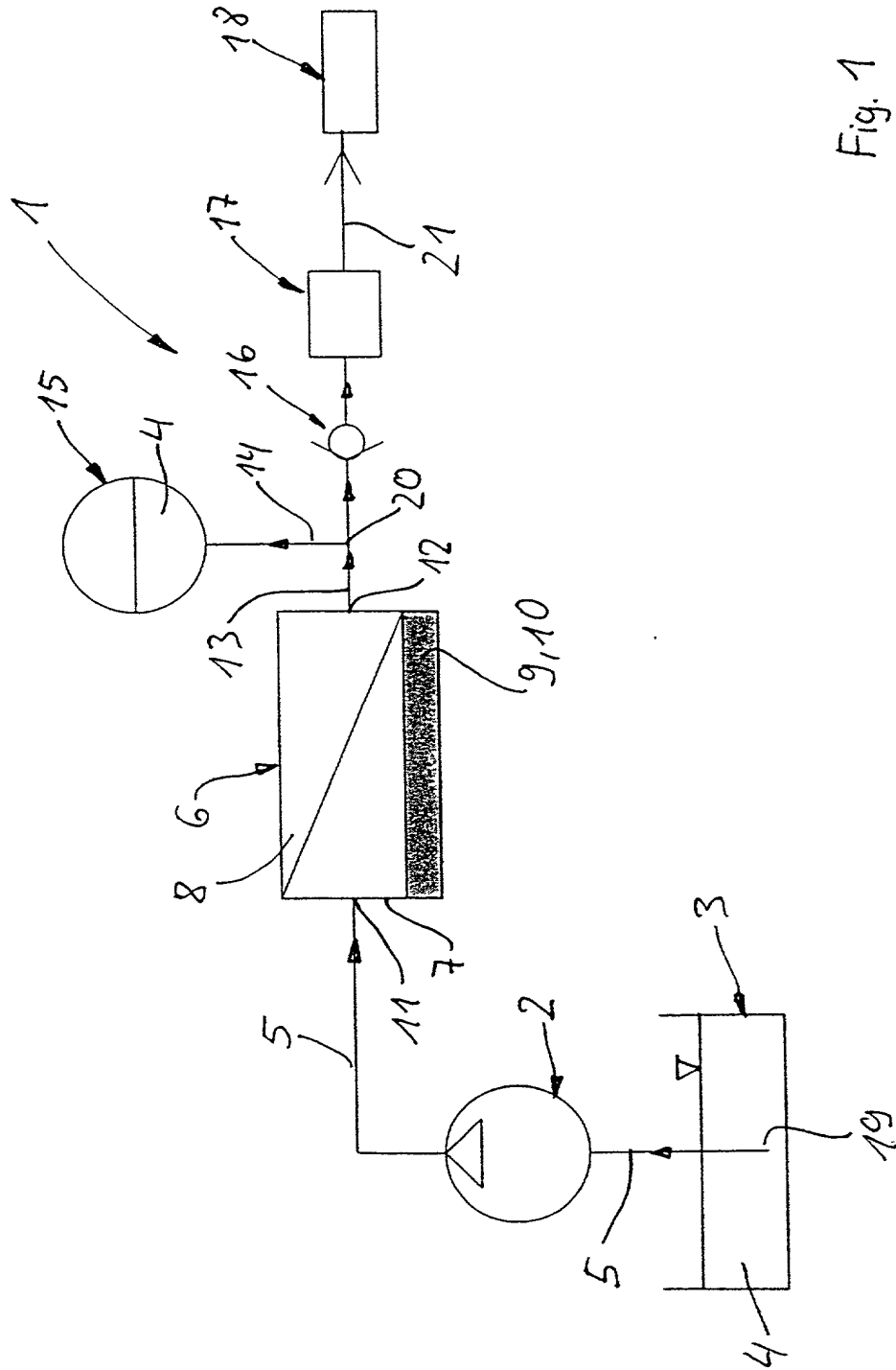


Fig. 1

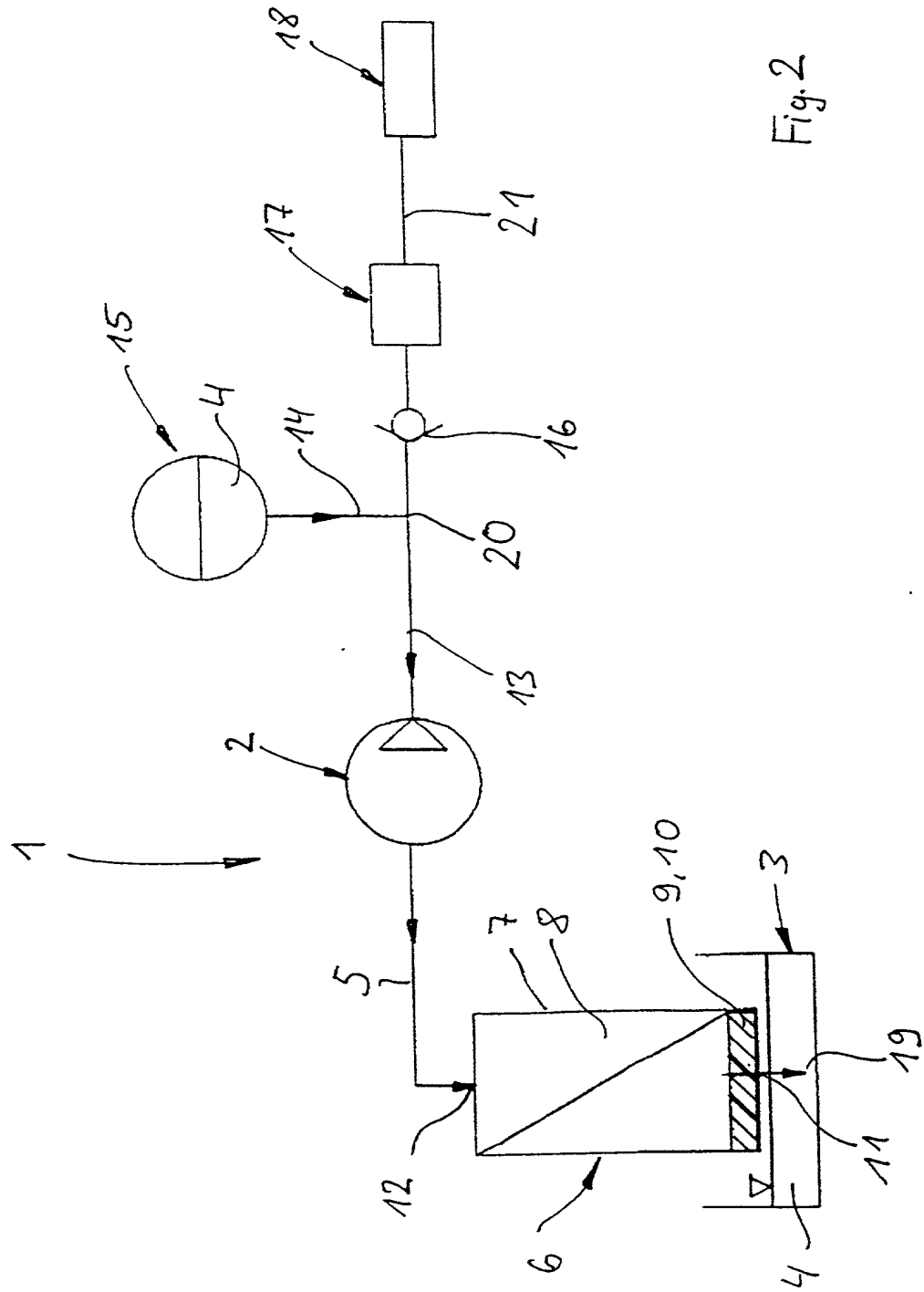


Fig. 2

09/700172

COMBINED DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY  
(includes Reference to PCT International Applications)

ATTORNEY'S DOCKET NUMBER  
**951/49129**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**FUEL SYSTEM FOR A MOTOR VEHICLE**

the specification of which (check only one item below):

☐ is attached hereto.

☐ was filed as United States application

Serial No. \_\_\_\_\_

on \_\_\_\_\_

and was amended

on \_\_\_\_\_ (if applicable).

☒ was filed as PCT international application

Number **PCT/EP00/01599**

on **25 February 2000 (25.02.00)**

and was amended under PCT Article 19

on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations. §1.56(a).

I hereby claim foreign priority benefits under Title 35, United State Code, §119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:

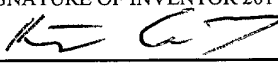
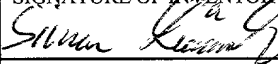
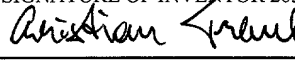
PRIOR FOREIGN/PCT APPLICATION(S) AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. 119:

COUNTRY (if PCT indicate PCT)	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 35 USC 119
Germany	199 11 068.9	12 March 1999 (12.03.99)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No



**23911**

PATENT TRADEMARK OFFICE

Combined Declaration For Patent Application and Power of Attorney (Continued) (includes Reference to PCT international Applications)			ATTORNEY'S DOCKET NUMBER <b>951/49129</b>	
I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application(s) and the national of PCT international filing date of this application:				
PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE U.S. FOR BENEFIT UNDER 35 U.S.C. 120				
U.S. APPLICATIONS			STATUS (Check one)	
U.S. APPLICATION NUMBER	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
PCT APPLICATIONS DESIGNATING THE U.S.				
PCT APPLICATION NO	PCT FILING DATE	U.S. SERIAL NUMBERS ASSIGNED (IF ANY)		
<p>POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (List name and registration number)</p> <div style="display: flex; align-items: flex-start;"> <div style="font-size: 2em; margin-right: 10px;">6</div> <div> <p>Herbert I. Cantor, Reg. No. <u>24,392</u>; James F. McKeown, Reg. No. <u>25,406</u>; Donald D. Evenson, Reg. No. <u>26,160</u>; Joseph D. Evans, Reg. No. <u>26,269</u>; Gary R. Edwards, Reg. No. <u>31,824</u>; and Jeffrey D. Sanok, Reg. No. <u>32,169</u></p> </div> </div>				
Send Correspondence to:			Direct Telephone Calls to: (name and telephone number)	
<div style="display: flex; align-items: center;"> <div style="font-size: 2em; margin-right: 10px;">LD</div> <div> <p><u>Evenson, McKeown, Edwards &amp; Lenahan, P.L.L.C.</u>  <u>1200 G Street, N.W., Suite 700</u>  <u>Washington, D.C. 20005</u></p> </div> </div>			(202) 628-8800	
201	FULL NAME OF INVENTOR	FAMILY NAME <u>KROISS</u>	FIRST GIVEN NAME <u>Hugo</u>	SECOND GIVEN NAME
	RESIDENCE & CITIZENSHIP	CITY <u>Groebenzell</u>	STATE OR FOREIGN COUNTRY <u>Germany</u>	COUNTRY OF CITIZENSHIP <u>Germany</u>
	POST OFFICE ADDRESS	POST OFFICE ADDRESS <u>Groebenbachstrasse 12A</u>	CITY <u>Groebenzell</u>	STATE & ZIP CODE/COUNTRY <u>D-82194 GERMANY</u>
202	FULL NAME OF INVENTOR	FAMILY NAME <u>LOESCH</u>	FIRST GIVEN NAME <u>Simon</u>	SECOND GIVEN NAME
	RESIDENCE & CITIZENSHIP	CITY <u>Wartenberg</u>	STATE OR FOREIGN COUNTRY <u>Germany</u>	COUNTRY OF CITIZENSHIP <u>Germany</u>
	POST OFFICE ADDRESS	POST OFFICE ADDRESS <u>Moosburger Strasse 25</u>	CITY <u>Wartenberg</u>	STATE & ZIP CODE/COUNTRY <u>D-85456 GERMANY</u>
203	FULL NAME OF INVENTOR	FAMILY NAME <u>TREML</u>	FIRST GIVEN NAME <u>Christian</u>	SECOND GIVEN NAME
	RESIDENCE & CITIZENSHIP	CITY <u>Muenchen</u>	STATE OR FOREIGN COUNTRY <u>GERMANY</u>	COUNTRY OF CITIZENSHIP <u>Austria</u>
	POST OFFICE ADDRESS	POST OFFICE ADDRESS <u>Appenzeller Strasse 5</u>	CITY <u>Muenchen</u>	STATE & ZIP CODE/COUNTRY <u>D-81475 GERMANY</u>
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true: and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.				
SIGNATURE OF INVENTOR 201		SIGNATURE OF INVENTOR 202		SIGNATURE OF INVENTOR 203
				
DATE <u>2.11.00</u>		Date <u>06.11.00</u>		DATE <u>06.11.00</u>



+49 89 38237262

Combined Declaration For Patent Application and Power of Attorney (Continued) (includes Reference to PCT international Applications)				ATTORNEY'S DOCKET NUMBER 951/49129	
I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112. I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application(s) and the national of PCT international filing date of this application:					
PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE U.S. FOR BENEFIT UNDER 35 U.S.C. 120					
U.S. APPLICATIONS			STATUS (Check one)		
U.S. APPLICATION NUMBER	U.S. FILING DATE		PATENTED	PENDING	ABANDONED
PCT APPLICATIONS DESIGNATING THE U.S.					
PCT APPLICATION NO	PCT FILING DATE	U.S. SERIAL NUMBERS ASSIGNED (IF ANY)			
<p>POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (List name and registration number)</p> <p>Herbert I. Cantor, Reg. No. 24,392; James F. McKeown, Reg. No. 25,406; Donald D. Evenson, Reg. No. 26,160; Joseph D. Evans, Reg. No. 26,269; Gary R. Edwards, Reg. No. 31,824 and Jeffrey D. Sanok, Reg. No. 32,169</p>					
Send Correspondence to:			Direct Telephone Calls to:		
Evenson, McKeown, Edwards & Lenahan, P.L.L.C. 1200 G Street, N.W., Suite 700 Washington, D.C. 20005			(name and telephone number)  (202) 628-8800		
204	FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME	
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP	
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE & ZIP CODE/COUNTRY	
		Wissenbach	Georg		
		Berg	Germany	Germany	
		Weihenfeld 14	Borg	D-82335 GERMANY	
205	FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME	
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP	
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE & ZIP CODE/COUNTRY	
		Bode	Henning		
		Einbeck	Germany	Germany	
		Neue Reihe 11	Einbeck	D-37574 GERMANY	
206	FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME	
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP	
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE & ZIP CODE/COUNTRY	
		Turini	Juergen		
		Maisach	Germany	D-82216 GERMANY	
		Lindenstrasse 1	Maisach	D-85581 GERMANY	
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.					
SIGNATURE OF INVENTOR 204		SIGNATURE OF INVENTOR 205		SIGNATURE OF INVENTOR 206	
		<i>Henning Bode</i>			
DATE		Date		DATE	
		06. NOV. 2000			

Combined Declaration For Patent Application and Power of Attorney (Continued) (includes Reference to PCT international Applications)				ATTORNEY'S DOCKET NUMBER 951/49129	
I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application(s) and the national of PCT international filing date of this application:					
PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE U.S. FOR BENEFIT UNDER 35 U.S.C. 120					
U.S. APPLICATIONS			STATUS (Check one)		
U.S. APPLICATION NUMBER	U.S. FILING DATE	PATENTED	PENDING	ABANDONED	
PCT APPLICATIONS DESIGNATING THE U.S.					
PCT APPLICATION NO	PCT FILING DATE	U.S. SERIAL NUMBERS ASSIGNED (IF ANY)			
<p>POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (List name and registration number)</p> <p style="text-align: center;">Herbert I. Cantor, Reg. No. 24,392; James F. McKeown, Reg. No. 25,406; Donald D. Evenson, Reg. No. 26,160; Joseph D. Evans, Reg. No. 26,269; Gary R. Edwards, Reg. No. 31,824 and Jeffrey D. Sanok, Reg. No. 32,169</p>					
Send Correspondence to:				Direct Telephone Calls to:	
Evenson, McKeown, Edwards & Lenahan, P.L.L.C. 1200 G Street, N.W., Suite 700 Washington, D.C. 20005				(name and telephone number)  (202) 628-8800	
204	FULL NAME OF INVENTOR	FAMILY NAME WISSENBACH	FIRST GIVEN NAME Georg	SECOND GIVEN NAME	
	RESIDENCE & CITIZENSHIP	CITY Berg	STATE OR FOREIGN COUNTRY Germany	COUNTRY OF CITIZENSHIP Germany	
	POST OFFICE ADDRESS	POST OFFICE ADDRESS Weiherfeld 14	CITY Berg	STATE & ZIP CODE/COUNTRY D-82335 GERMANY	
205	FULL NAME OF INVENTOR	FAMILY NAME BODE	FIRST GIVEN NAME Henning	SECOND GIVEN NAME	
	RESIDENCE & CITIZENSHIP	CITY Einbeck	STATE OR FOREIGN COUNTRY Germany	COUNTRY OF CITIZENSHIP Germany	
	POST OFFICE ADDRESS	POST OFFICE ADDRESS Neue Reihe 11	CITY Einbeck	STATE & ZIP CODE/COUNTRY D-37574 GERMANY	
206	FULL NAME OF INVENTOR	FAMILY NAME TURINI	FIRST GIVEN NAME Juergen	SECOND GIVEN NAME	
	RESIDENCE & CITIZENSHIP	CITY Maisach	STATE OR FOREIGN COUNTRY Germany	COUNTRY OF CITIZENSHIP D-82216 GERMANY	
	POST OFFICE ADDRESS	POST OFFICE ADDRESS Lindenstrasse 1	CITY Maisach	STATE & ZIP CODE/COUNTRY D-85581 GERMANY	
<p>I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true: and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.</p>					
SIGNATURE OF INVENTOR 204		SIGNATURE OF INVENTOR 205		SIGNATURE OF INVENTOR 206	
DATE 6.11.00		DATE		DATE 6.11.00	

+49 89 38237262

Combined Declaration For Patent Application and Power of Attorney (Continued) (includes Reference to PCT international Applications)				ATTORNEY'S DOCKET NUMBER 951/49129	
I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application(s) and the national of PCT international filing date of this application:					
PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE U.S. FOR BENEFIT UNDER 35 U.S.C. 120					
U.S. APPLICATIONS			STATUS (Check one)		
U.S. APPLICATION NUMBER	U.S. FILING DATE		PATENTED	PENDING	ABANDONED
PCT APPLICATIONS DESIGNATING THE U.S.					
PCT APPLICATION NO	PCT FILING DATE	U.S. SERIAL NUMBERS ASSIGNED (IF ANY)			
POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (List name and registration number)					
Herbert I. Cantor, Reg. No. 24,392; James F. McKeown, Reg. No. 25,406; Donald D. Evenson, Reg. No. 26,160; Joseph D. Evans, Reg. No. 26,269; Gary R. Edwards, Reg. No. 31,824; and Jeffrey D. Sanok, Reg. No. 32,169					
Send Correspondence to:				Direct Telephone Calls to:	
Evenson, McKeown, Edwards & Lenahan, P.L.L.C. 1200 G Street, N.W., Suite 700 Washington, D.C. 20005				(name and telephone number)  (202) 628-8800	
207	FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME	
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP	
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE & ZIP CODE/COUNTRY	
208	FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME	
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP	
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE & ZIP CODE/COUNTRY	
209	FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME	
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP	
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE & ZIP CODE/COUNTRY	
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.					
SIGNATURE OF INVENTOR 207		SIGNATURE OF INVENTOR 208		SIGNATURE OF INVENTOR 209	
DATE		DATE		DATE	